Sequence Protocol

<110>   metaGen Gesellschaft für Genomforschung mbH

<120>   Human Nucleic Acid Sequences from Hysteromyomic Tissue

<140> PCT/DE99/01178
<141> 1999-04-14

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<400> 10

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<210> 12
<211> 1769
<212> DNA
<213> homo sapiens

<400> 12

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<210> 13
<211> 1026
<212> DNA
<213> homo sapiens

<400> 13

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<210> 14
<211> 676
<212> DNA
<213> homo sapiens

<400> 14

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<211> 1254
<212> DNA
<213> homo sapiens

<400> 15

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<210> 16
<211> 537
<212> DNA
<213> homo sapiens

<400> 16

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<210> 17
<211> 823
<212> DNA
<213> homo sapiens

<400> 17

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<210> 18
<211> 1082
<212> DNA
<213> homo sapiens

<400> 18

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<210> 19
<211> 1548
<212> DNA
<213> homo sapiens

<400> 19

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<210> 20
<211> 844
<212> DNA
<213> homo sapiens


<400> 20

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<210> 21
<211> 862
<212> DNA
<213> homo sapiens


<400> 21

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<210> 22
<211> 546
<212> DNA
<213> homo sapiens


<400> 22

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<210> 23
<211> 1591
<212> DNA
<213> homo sapiens

<400> 23

gccgaggagc cgagcccgcc accccccgc ccgcccgccg ccgccatggg ctgcctcggg  60
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tcgagaagca gctgcagaag gacaagcagg tctaccgggc cacgcaccgc ctgctgctgc 180
tgggtgctgg agaatctggt aaaagcacca ttgtgaagca gatgaggatc ctgcatgtta 240
atgggtttaa tggagacagt gagaaggcaa ccaaagtgca ggacatcaaa aacaacctga 300
aagaggcgat tgaaaccatt gtggccgcca tgagcaacct ggtgcccccc gtggagctgg 360
ccaaccccga gaaccagttc agagtggact acattctgag tgtgatgaac gtgcctgact 420
ttgacttccc tcccgaattc tatgagcatg ccaaggctct gtgggaggat gaaggagtgc 480
gtgcctgcta cgaacgctcc aacgagtacc agctgattga ctgtgcccag tacttcctgg 540
acaagatcga cgtgatcaag caggctgact atgtgccgag cgatcaggac ctgcttcgct 600
gccgtgtcct gacttctgga atctttgaga ccaagttcca ggtggacaaa gtcaacttcc 660
acatgtttga cgtgggtggc cagcgcgatg aacgccgcaa gtggatccag tgcttcaacg 720
atgtgactgc catcatcttc gtggtggcca gcagcagcta caacatggtc atccgggagg 780
acaaccagac caaccgcctg caggaggctc tgaacctctt caagagcatc tggaacaaca 840
gatggctgcg caccatctct gtgatcctgt tcctcaacaa gcaagatctg ctcgctgaga 900
aagtccttgc tgggaaatcg aagattgagg actactttcc agaatttgct cgctacacta 960
ctcctgagga tgctactccc gagcccggag aggacccacg cgtgacccgg gccaagtact1020
tcattcgaga tgagtttctg aggatcagca ctgccagtgg agatgggcgt cactactgct1080
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gtgacatcat tcagcgcatg caccttcgtc agtacgagct gctctaagaa gggaacccccc1200
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gcctacagaa aaaggaaaaa aggccacaaa agttccctct cactttcagt aaaaataaat1440
aaaacagcag cagcaaacaa ataaaatgaa ataaaagaaa caaatgaaat aaatattgtg1500
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ggcaaaaggg aaagaagaa aaggggggggg g                              1591


<210> 24
<211> 441
<212> DNA
<213> homo sapiens


<400> 24

ggcaggcaga tacgttcgtc agcttgctcc tttctgcccg tggacgccgc cgaagaagca 60
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aacagctgag gaagctcttc attggagggt tgagctttga aacaactgat gagagcctga180
ggagccattt tgagcaatgg ggaacgctca cggactgtgt ggtaatgaga gatccaaaca240
ccaagcgctc caggggcttt gggtttgtca catatgccac tgtggaggag gtggatgcag300
ctatgaatgc aaggccacac aaggtggatg gaagagttgt ggaaccaaag agagctgttt360
cagagaagat ttgaaaagcc aggtgccact tacctgtgaa aaggtatttg ttggtggatt420
aaggagcact tgagacatca c                                         441


<210> 25
<211> 1131
<212> DNA
<213> homo sapiens


<400> 25

cgggaggtga aatccggttc taaccggtcc ggggctccca gcgctataaa aactttataa  60
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acccccccgga gccccgagcag tgtgaagaag aggcgagaac gaccccccgga ccgaccaaag  120
cccgcgcgcc gctgcatccc gcgtccagca cctacgtccc gctgccgtcg ccgccgccac  180
catgcccaag agaaaggctg aaggggatgc taagggagat aaagcaaagg tgaaggacga  240
accacagaga agatccgcga ggttgtctgc taaacctgct cctccaaagc cagagcccaa  300
gcctaaaaag gcccctgcaa agaagggaga gaaggtaccc aaagggaaaa agggaaaagc  360
tgatgctggc aaggagggga ataaccctgc agaaaatgga gatgccaaaa cagaccaggc  420
acagaaagct gaaggtgctg gagatgccaa gtgaagtgtg tgcattttttg ataactgtgt  480
acttctggtg actgtacagt ttgaaatact attttttatc aagtttttata aaaatgcaga  540
attttgtttt acttttttttt ttttttttaaa agctatgttg ttagcacaca gaacacttca  600
ttgttgtttt tgggggaagg ggcatatgtc actaatagaa tgtctccaaa gctggattga  660
tgtggagaaa acacctttcc cttctagttt tgagagactt cctcttggct cccaggagga  720
gggattccct gactttgaca cacatggcca ccttggcaca aaagccttgt ggtatagaaa  780
aacaaatttg tttttatgtc ctcttctccc tttccatctt tcagcataga cttaactccc  840
ttaagcccag acatctgttg agacctgacc cctagtcatt ggttaccagt gtgtcaggca  900
atctggactt ccagtgatg ccactgagat ggcacctgtc aaaagagcag tggttccatt  960
tctagattgt ggatcttcag ataaattctg ccattttcat ttcacttcct gaaagtcagg1020
gtcggcttgt gaaaagttgt taaacaacat gctaaatgtg aaatgtcaac cctcactcta1080
aaacttttcc ctgggtcaga ggatccgatg gaggacttca attggggggtt t         1131

<210> 26
<211> 1071
<212> DNA
<213> homo sapiens

<400> 26

gtaccctcaa agacagagac accaagaaga atcggaacat acaggctttg atatcaaagg   60
tttataaagc caatatctgg gaaagagaaa accgtgagac ttccagatct tctctggtga  120
agtgttgttt cctgcaacga tcacgaacat gaacatcaaa ggatcgccat ggaaagggtc  180
cctcctgctg ctgctggtgt caaacctgct cctgtgccag agcgtggccc ccttgcccat  240
ctgtcccggc ggggctgccc gatgccaggt gacccttcga gacctgtttg accgcgccgt  300
cgtcctgtcc cactacatcc ataacctctc ctcagaaatg ttcagcgaat cgataaacg  360
gtatacccat ggccgggggt tcattaccaa ggccatcaac agctgccaca cttcttccct  420
tgccaccccc gaagacaagg agcaagccca acagatgaat caaaaagact ttctgagcct  480
gatagtcagc atattgcgat cctggaatga gcctctgtat catctggtca cggaagtacg  540
tggtatgcaa gaagccccgg aggctatcct atccaaagct gtagagattg aggagcaaac  600
caaacggctt ctagagggca tggagctgat agtcagccag gttcatcctg aaaccaaaga  660
aaatgagatc taccctgtct ggtcgggact tccatccctg cagatggctg atgaagagtc  720
tcgcctttct gcttattata acctgctcca ctgcctacgc agggattcac ataaaatcga  780
caattatctc aagctcctga agtgccgaat catccacaac aacaactgct aagcccacat  840
ccatttcatc tatttctgag aaggtcctta atgatccgtt ccattgcaag cttcttttag  900
ttgtatctct tttgaatcca tgcttgggtg taacaggtct cctcttaaaa aataaaaact  960
gactccttag agacatcaaa atctaaaaaa acttaatggg ccgggcgcag tggctcatgg1020
ctgtggtccc ggcactttgg gaggccgagg caggcggatc aggaggtcag g          1071
```

```
<400> 27

gtgaccggct cagaccggtt ctggagacaa aaggggccgc ggcggccgga gcgggacggg   60
cccggcgcgg gagggagcga agagcgcggg cagcgagcga gatgcagcac cgaggcttcc120
tcctcctcac cctcctcgcc ctgctggcgc tcacctccgc ggtcgccaaa aagaaagata180
aggtgaagaa gggcggcccg gggagcgagt gcgctgagtg ggcctggggg ccctgcaccc240
ccagcagcaa ggattgcggc gtgggtttcc gcgagggcac ctgcgggggcc cagacccagc300
gcatccggtg cagggtgccc tgcaactgga gaaggagtt tggagccgac tgcaagtaca360
agtttgagaa ctggggtgcg tgtgatgggg gcacaggcac caaagtccgc caaggcaccc420
tgaagaaggc gcgctacaat gctcagtgcc aggagaccat ccgcgtcacc aagcccctgca480
cccccaagac caaagcaaag gccaaagcca agaaagggaa gggaaaggac tagacgccaa540
gcctggatgc caaggagccc ctggtgtcac atggggcctg gcccacgccc tccctctccc600
aggcccgaga tgtgacccac cagtgccttc tgtctgctcg ttagctttaa tcaatcatgc660
```

```
cctgccttgt ccctctcact ccccagcccc acccctaagt gcccaaagtg gggagggaca720
agggattctg ggaagcttga gcctccccca aagcaatgtg agtcccagag cccgcttttg780
ttcttcccca caattccatt actaagaaac acatcaaata aactgacttt ttcccccaa840
aaaaagctct tcttttttaa tataaaaaaa aaaaaaaaaa aaaaaaaaaa aagaaa     896
```

<210> 28
<211> 1050
<212> DNA
<213> homo sapiens

<400> 28

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ttttcatttt tttttttttt ttttctcag ttcaagttta atacaaacta caaaagatta  60
atgggttgct ctactaatac atcatacaaa ccagtagcct gcccacaacg ccaactcagg 120
ccattcctac caaaggaaga aaggctggtc tctccacccc ctgtaggaaa ggcctgcctt 180
gtaagacacc acaattcggc tgaatctgaa gtcttgtgtt ttactaatgg aaaaaaaaaa 240
tacagaagag gttttgttct catggctgcc caccgcagcc tggcactaaa acagcccagc 300
gctcacttct gcttggagaa atattctttg ctcttttgga catcaggctt gatggtatca 360
ctgccaggtt tccagccagc tgggcacact tccccatgtt tgtcagtgaa ctggaaggcc 420
tgaactagtc tcaaagtctc atccacagag cggccaacag ggaggtcatt tacagtgatc 480
tgccgaagaa taccccttatc atcaatgata aaaaggcccc tgaacgagat gccttcatca 540
gcctttaaga ccccataatc ctgagcaatg gtgcgcttcg ggtctgatac caaaggaatg 600
ttcatgggtc ccagtcctcc ttgtttctta ggtgtattga cccatgctag atgacagaag 660
tgagaatcca cagaagcacc aatcacttgg cagttgagtt tcttaaattc ttctgcccta 720
tcactgaaag caatgatctc cgtggggcac acaaaggtga agtcaagagg gtaaaagaag 780
aacacaacat attttccttt gtagtcagac aggctgatat ctttaaactg accatctggc 840
ataacagctg tggctttgaa gttggggggca gggtgcccaa ttttagcatt tcctgaagac 900
atcttcctat cagcagtccc aacacaagtc gcagaaacta accaccgaca ccaggcaaga 960
acaagacgcg caagagctct ccggggcgct gcctttatag ccagtaggga tctcgccaca1020
gtcggaacgg acggggggtgc cggagtagga                                 1050
```

<210> 29
<211> 581
<212> DNA
<213> homo sapiens

<400> 29

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caggcttcct tctggcaaca ggcgtgggtc acgctctcgc tcggtctttc tgccgccatc 60
ttggttccgc gttccctgca caaaatgccc ggcgaacacc agaaaccgtc cctgctacag120
agcaggagtt gccgcagccc caggctgaga cagggtctgg aacagaatct gacagtgatg180
aatcagtacc agagcttgaa gaacaggatt ccacccaggc aaccacacaa caagcccagc240
tggcggcagc agctgaaatc gatgaagaac cagtcagtaa agcaaaacag agtcggagtg300
aaaagaaggc acggaaggct atgtccaaac tgggtcttcg gcaggttaca ggagttacta360
gagtcactat ccggaaatct aagaatatcc tctttgtcat cacaaaacca gttgtctaca420
agagccctgc ttcagatacg tacatagttt ttggggaagc cagatcgaag attatcccag480
caagcacaac tagcagctgc tgagaagtca agttcaggtg aactgtctca acgttcagga540
aaccccggc ttccactgta gagggggagt aaggggaggg t                      581
```

<210> 30
<211> 264
<212> DNA
<213> homo sapiens

<400> 30

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gggactatgt tgtgagcctg cgaaagaagt ttgtgtgggg actgtgggca gtgaatgcgt 60
tgggaacaat atggaaaact gggagctgcc ctcagtttct ccccaagttg gactcacttt120
cggggtgtcc caaaagcctg attccagggc ctgctagccc gaccccggtg acgcctccac180
ccgcgcctgg ccccagcctt cacccgcgat cgccgccctc cggggcacac cctccgccag240
aaaacagccg gcgggcggcg agac                                        264
```

<210> 31

<211> 111
<212> DNA
<213> homo sapiens

<400> 31

cggcgaatca cttataaatg gcgccgaagc aggagcccga aggctaaatt gcaggagggg 60
tgagcgaatg ctgtgctttc atgggcctct tacgttgatg aggcaaagta t   111

<210> 32
<211> 76
<212> PRT
<213> homo sapiens

<400> 32

Pro 1	Phe	Cys	Glu	Glu 5	Thr	Lys	Thr	Glu	Arg 10	Leu	Trp	Pro	Arg	Cys 15	Arg
Pro	Pro	Ala	Ala 20	Val	Gly	Phe	Ser	Thr 25	Gln	Asn	Pro	Gly	Val 30	Gly	Asp
Ser	Glu	Ser 35	Asn	Leu	Phe	Ser	Leu 40	Pro	Phe	Leu	Gly	Ser 45	Lys	Ala	Asn
Pro	Ile 50	Pro	Thr	His	Trp	Ser 55	Ser	Ala	Leu	Ile	Phe 60	Asn	Leu	Pro	Ser
Pro 65	Pro	Phe	Gln	Asn	Thr 70	His	Ile	Pro	Phe	Gln 75	Asn				

<210> 33
<211> 72
<212> PRT
<213> homo sapiens

<400> 33

Ser 1	Ser	Phe	Leu	Phe 5	Ser	Phe	Gln	Thr	Gln 10	Phe	His	Lys	Asn	Arg 15	Lys
Asp	Lys	Val	Phe 20	Ser	Ser	Arg	Gln	Ala 25	Lys	Pro	Phe	Pro	His 30	His	Gln
Ser	Ile	Leu 35	Lys	Ile	His	Glu	Glu 40	Val	Glu	Arg	Ser	Val 45	Ser	Gly	Arg
Leu	Lys 50	Gly	Ser	Ser	Ser	Ser 55	Asn	Pro	Thr	Ala	Ala 60	Glu	Lys	Ile	Glu
Ile 65	Glu	Ile	Leu	Lys	Ile 70	Thr	Ser								

<210> 34
<211> 70
<212> PRT
<213> homo sapiens

<400> 34

Lys 1	Lys	Leu	Asp	Tyr 5	Phe	Cys	Ala	Glu	Ile 10	Lys	Asn	Ser	His	Cys 15	Lys

```
Thr  Lys  Ile  Lys  Ile  Ala  Gln  Ile  Arg  Lys  Pro  Gly  Gly  Ala  Lys  Cys
               20                        25                        30

Gln  Val  Ser  Lys  Val  His  Phe  Phe  Ser  Leu  Ser  Lys  Arg  Ser  Ser  Thr
               35                        40                        45

Lys  Thr  Ala  Arg  Ile  Lys  Phe  Ser  Val  Ala  Asp  Lys  Gln  Ser  Pro  Phe
          50                        55                        60

His  Ile  Ile  Asn  Gln  Ser
65                        70
```

<210> 35
<211> 60
<212> PRT
<213> homo sapiens

<400> 35

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Ser  Ser  Gly  Pro  Ala  Pro  Gly  Cys  Ser  Pro  Phe  Ala  Gly  Thr  Arg  Lys
1                   5                   10                            15

Asn  Phe  Pro  Ser  Met  Val  Val  Leu  Glu  Arg  Thr  Phe  Leu  Lys  Ile  Asn
               20                        25                        30

Tyr  Ile  Phe  Leu  Cys  Ile  Pro  Met  Glu  Phe  Gln  Phe  Ile  Arg  Cys  Ser
               35                        40                        45

Pro  Trp  Pro  Pro  Gln  Asn  Thr  Glu  Val  Ile  Pro  Ala
          50                        55                        60
```

<210> 36
<211> 63
<212> PRT
<213> homo sapiens

<400> 36

```
Ala  Ser  Gly  Val  His  Thr  Glu  Thr  His  Arg  Tyr  Asn  Leu  Leu  Ser  Ala
1                   5                   10                            15

Lys  Ser  Arg  Lys  Lys  Gly  Trp  Gly  Tyr  Leu  Gly  Trp  Leu  Gly  Phe  Asp
               20                        25                        30

Phe  Leu  Leu  Val  Cys  Leu  Phe  Cys  Thr  Lys  Thr  Val  Leu  Ser  Phe  Glu
               35                        40                        45

Tyr  Arg  Arg  Asp  Ile  Ser  Ile  Tyr  Met  Leu  Ser  Asn  Gln  Asp  Gly
          50                        55                        60
```

<210> 37
<211> 170
<212> PRT
<213> homo sapiens

<400> 37

```
Ala  Arg  Ala  Ala  Arg  Ala  Ala  Gln  Thr  Pro  His  Leu  Thr  Leu  Pro  Ala
1                   5                   10                            15

Asp  Leu  Gln  Thr  Leu  His  Leu  Asn  Arg  Pro  Thr  Leu  Ser  Pro  Glu  Ser
               20                        25                        30
```

| Lys | Leu | Glu | Trp | Asn | Asn | Asp | Ile | Pro | Glu | Val | Asn | His | Leu | Asn | Ser |
| | | 35 | | | | | 40 | | | | | 45 | | | |

| Glu | His | Trp | Arg | Lys | Thr | Glu | Lys | Trp | Thr | Gly | His | Glu | Glu | Thr | Asn |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| His | Leu | Glu | Thr | Asp | Phe | Ser | Gly | Asp | Gly | Met | Thr | Glu | Leu | Glu | Leu |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |

| Gly | Pro | Ser | Pro | Arg | Leu | Gln | Pro | Ile | Arg | Arg | His | Pro | Lys | Glu | Leu |
| | | | | 85 | | | | | 90 | | | | | 95 | |

| Pro | Gln | Tyr | Gly | Gly | Pro | Gly | Lys | Asp | Ile | Phe | Glu | Asp | Gln | Leu | Tyr |
| | | | 100 | | | | | 105 | | | | | 110 | | |

| Leu | Pro | Val | His | Ser | Asp | Gly | Ile | Ser | Val | His | Gln | Met | Phe | Thr | Met |
| | | 115 | | | | | 120 | | | | | 125 | | | |

| Ala | Thr | Ala | Glu | His | Arg | Ser | Asn | Ser | Ser | Ile | Ala | Gly | Lys | Met | Leu |
| | 130 | | | | | 135 | | | | | 140 | | | | |

| Thr | Lys | Val | Glu | Lys | Asn | His | Glu | Lys | Glu | Lys | Ser | Gln | His | Leu | Glu |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |

| Gly | Ser | Ala | Ser | Ser | Ser | Leu | Ser | Ser | Asp | | | | | | |
| | | | | 165 | | | | | 170 | | | | | | |

<210> 38
<211> 144
<212> PRT
<213> homo sapiens

<400> 38

| Ala | Arg | Ala | Pro | Thr | Leu | Asp | Met | Arg | Phe | Arg | Arg | Arg | Leu | Ser | Ala |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| Asp | Pro | His | Ala | Thr | Gln | Arg | Asn | Ser | Ala | Glu | Ala | Arg | Gly | Thr | Met |
| | | | 20 | | | | | 25 | | | | | 30 | | |

| Asp | Gly | Arg | Val | Gln | Leu | Met | Lys | Ala | Leu | Leu | Ala | Gly | Pro | Leu | Arg |
| | | 35 | | | | | 40 | | | | | 45 | | | |

| Pro | Ala | Ala | Arg | Arg | Trp | Arg | Asn | Pro | Ile | Pro | Phe | Pro | Glu | Thr | Phe |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| Asp | Gly | Asp | Thr | Asp | Arg | Leu | Pro | Glu | Phe | Ile | Val | Gln | Thr | Cys | Ser |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |

| Tyr | Met | Phe | Val | Asp | Glu | Asn | Thr | Phe | Ser | Asn | Asp | Ala | Leu | Lys | Val |
| | | | 85 | | | | | 90 | | | | | 95 | | |

| Thr | Phe | Leu | Ile | Thr | Arg | Leu | Thr | Gly | Pro | Ala | Leu | Gln | Trp | Val | Ile |
| | | | 100 | | | | | 105 | | | | | 110 | | |

| Pro | Tyr | Ile | Arg | Lys | Glu | Ser | Pro | Leu | Leu | Asn | Asp | Tyr | Arg | Gly | Phe |
| | | 115 | | | | | 120 | | | | | 125 | | | |

| Leu | Ala | Glu | Met | Lys | Arg | Val | Phe | Gly | Trp | Glu | Glu | Asp | Glu | Asp | Phe |
| | 130 | | | | | 135 | | | | | 140 | | | | |

<210> 39
<211> 178

<212> PRT
<213> homo sapiens

<400> 39

His	Ser	Leu	Gly	Arg	Ala	Pro	Val	Glu	Thr	Leu	Ala	Val	Ala	Thr	Gly
1				5					10					15	

Thr	Ala	Asn	Ser	Ser	Gln	Ser	Thr	Arg	Pro	Gln	Ala	Arg	Gly	Ser	Pro
			20					25					30		

Gly	Leu	Glu	Val	Leu	Val	Leu	Leu	Pro	Ser	Lys	Asp	Ser	Leu	His	Leu
		35					40					45			

Gly	Gln	Lys	Ala	Pro	Val	Ile	Ile	Glu	Gln	Gly	Ala	Leu	Leu	Pro	Asp
	50					55					60				

Val	Gly	Asp	His	Pro	Leu	Gln	Gly	Trp	Pro	Arg	Glu	Ala	Gly	Asp	Glu
65					70					75					80

Glu	Arg	His	Leu	Gln	Gly	Val	Val	Gly	Glu	Arg	Val	Leu	Val	His	Glu
				85					90					95	

His	Val	Gly	Ala	Arg	Leu	His	Asp	Glu	Leu	Arg	Glu	Ser	Val	Gly	Ile
			100					105					110		

Ser	Val	Lys	Arg	Leu	Gly	Lys	Gly	Asn	Arg	Val	Pro	Pro	Ala	Thr	Arg
		115					120					125			

Arg	Gly	Pro	Glu	Gly	Pro	Gly	Gln	Glu	Gly	Leu	His	Gln	Leu	His	Pro
	130					135					140				

Thr	Val	His	Arg	Ala	Ala	Arg	Leu	Arg	Gly	Val	Ser	Leu	Gly	Cys	Val
145					150					155					160

Gly	Val	Ser	Ala	Lys	Ala	Ser	Pro	Glu	Ala	His	Val	Glu	Gly	Gly	Gly
				165					170					175	

Pro	Gly

<210> 40
<211> 89
<212> PRT
<213> homo sapiens

<400> 40

Lys	Leu	Thr	Gly	Ile	Asn	Thr	Gly	Cys	Arg	Asn	Met	Leu	Ala	Leu	Cys
1				5					10					15	

Ile	Arg	Gly	His	Ala	Gln	Gln	Ile	Gln	Glu	Ile	Tyr	Leu	Ala	Thr	Phe
			20					25					30		

Ser	Arg	Lys	Gly	Thr	Leu	Gly	Ile	Ile	His	Tyr	Ile	Leu	Glu	Val	Phe
		35					40					45			

Leu	Gly	Phe	Phe	Phe	Phe	Phe	Leu	Arg	Gln	Ser	Cys	Cys	Ile	Ala	Gln
	50					55					60				

Ala	Gly	Ser	Val	Val	Ala	Gln	Ser	Gln	Leu	Ile	Ala	Ser	Ser	Ile	Thr
65					70					75					80

Gln	Gly	Leu	Ser	Asn	Pro	Pro	Thr	Leu

<210> 41
<211> 95
<212> PRT
<213> homo sapiens

<400> 41

Ile 1	Val	Thr	Trp	Arg 5	Lys	Val	Pro	Met	Ser 10	Leu	Cys	Gln	Arg	Pro 15	Pro
Pro	Phe	Val	Arg 20	Ile	Gly	Ile	Phe	Arg 25	Leu	Leu	Lys	Gly	Leu 30	Ala	His
Ile	Arg	Cys 35	Asp	Leu	Phe	Ile	Pro 40	Val	Val	Met	Glu	Gly 45	His	Ile	Cys
Gln	Ser 50	Leu	Glu	Ser	Ala	Lys 55	Ala	Gly	Thr	Arg	Phe 60	Pro	Gly	Pro	Gln
Trp 65	Gly	Cys	Ala	Asn	Pro 70	Arg	Glu	Leu	Gly	Cys 75	Lys	Phe	Val	Lys	Asn 80
Gln	His	His	Val	Trp 85	Gln	Leu	Ser	Ile	Gly 90	Ala	Arg	Ser	Leu	Pro 95	

<210> 42
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<212> PRT
<213> homo sapiens

<400> 42

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Gly	Leu	Thr	Ser 20	Ser	Gly	Asn	Ile	Thr 25	Phe	Ser	Trp	Ala	Glu 30	Met	Leu
Leu	Pro	Ala 35	Leu	Lys	Gln	His	Ser 40	Val	Leu	Lys	Thr	Ser 45	Trp	Gln	Ala
Pro	Gly 50	Ser	Asn	Thr	Gln	Leu 55	Pro	Asn	Met	Met	Leu 60	Ile	Leu	His	Glu
Phe 65	Ala	Thr	Gln	Phe	Ser 70	Arg	Val	Cys	Thr	Pro 75	Pro	Leu	Trp	Ala	Gly 80
Glu	Pro	Gly	Pro	Gly 85	Leu	Arg	Arg	Leu	Gln 90	Ala	Leu	Ala	Asp	Val 95	Ala
Leu	His	Asn	Asn 100	Gly	Asn	Glu	Lys	Val 105	Thr	Pro	Tyr	Val	Arg 110	Gln	Ala
Leu	Lys	Glu 115	Ser	Glu	Tyr	Pro	Asn 120	Pro	His	Lys	Arg	Arg 125	Gly	Thr	Leu
Ala	Lys 130	Thr	His	Gly	Asn	Phe 135	Pro	Pro	Ser	Asn	Asp 140	Leu	Asp	Arg	Arg
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<210> 43
<211> 79
<212> PRT
<213> homo sapiens

<400> 43

Leu	Ala	Ser	Thr	Leu	Gly	Val	Glu	Thr	Cys	Leu	Pro	Tyr	Val	Ser	Glu
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Asp	Met	Leu	Ser	Arg	Ser	Lys	Arg	Tyr	Ile	Trp	Gln	Leu	Phe	Leu	Glu
			20					25					30		

Lys	Ala	His	Trp	Val	Ser	Phe	Ile	Thr	Phe	Leu	Ser	Phe	Phe	Gly	Phe
		35					40					45			

Phe	Phe	Phe	Phe	Phe	Glu	Thr	Val	Leu	Leu	Tyr	Cys	Pro	Gly	Trp	Ser
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Val	Val	Ala	Gln	Ser	Gln	Leu	Ile	Ala	Ser	Ser	Ile	Thr	Gln	Ala	
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<212> PRT
<213> homo sapiens

<400> 44

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Gly	Leu	Thr	Ser	Ser	Gly	Asn	Ile	Thr	Phe	Ser	Trp	Ala	Glu	Met	Leu
			20					25					30		

Leu	Pro	Ala	Leu	Lys	Gln	His	Ser	Val	Leu	Lys	Thr	Ser	Trp	Gln	Ala
		35					40					45			

Pro	Gly	Ser	Asn	Thr	Gln	Leu	Pro	Asn	Met	Met	Leu	Ile	Leu	His	Glu
	50					55					60				

Phe	Ala	Thr	Ser	Trp	Leu	Pro	Arg	Leu	Gln	His	Ser	Ala	Val	Gly	Thr
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Gln	Ser

<210> 45
<211> 68
<212> PRT
<213> homo sapiens

<400> 45

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Gln	Leu	Ser	Cys	Arg	Gly	Phe	Ser	Asp	Gln	Phe	Ser	Arg	Val	Cys	Thr
			20					25					30		

Pro	Pro	Leu	Trp	Ala	Gly	Glu	Pro	Gly	Pro	Gly	Leu	Arg	Arg	Leu	Gln
		35					40					45			

Ala	Leu 50	Ala	Asp	Val	Ala	Leu 55	His	Asn	Asn	Gly	Asn 60	Glu	Lys	Val	Thr

Pro 65	Tyr	Val	Arg

<210> 46
<211> 87
<212> PRT
<213> homo sapiens

<400> 46

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Val	Asn	Ala	Leu 20	Gly	Thr	Ile	Trp	Lys 25	Thr	Gly	Ser	Cys	Pro 30	Gln	Phe
Leu	Pro	Lys 35	Leu	Asp	Ser	Leu	Ser 40	Gly	Cys	Pro	Lys	Ser 45	Leu	Ile	Pro
Gly	Pro 50	Ala	Ser	Pro	Thr	Pro 55	Val	Thr	Pro	Pro	Pro 60	Ala	Pro	Gly	Pro
Ser 65	Leu	His	Pro	Arg	Ser 70	Pro	Pro	Ser	Gly	Ala 75	His	Pro	Pro	Pro	Glu 80
Asn	Ser	Arg	Arg	Ala 85	Ala	Arg									

<210> 47
<211> 51
<212> PRT
<213> homo sapiens

<400> 47

Gln 1	Ala	Leu	Glu	Ser 5	Gly	Phe	Trp	Asp	Thr 10	Pro	Lys	Val	Ser	Pro 15	Thr
Trp	Gly	Glu	Thr 20	Glu	Gly	Ser	Ser	Gln 25	Phe	Ser	Ile	Leu	Phe 30	Pro	Thr
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His	Ser	Pro 50													

<210> 48
<211> 20
<212> PRT
<213> homo sapiens

<400> 48

Arg 1	Arg	Ile	Thr	Tyr 5	Lys	Trp	Arg	Arg	Ser 10	Arg	Ser	Pro	Lys	Ala 15	Lys
Leu	Gln	Glu	Gly 20												

<210> 49
<211> 36
<212> PRT
<213> homo sapiens

<400> 49

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Met Arg Gln Ser
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<210> 50
<211> 26
<212> PRT
<213> homo sapiens

<400> 50

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<211> 25
<212> PRT
<213> homo sapiens

<400> 51

Glu Ala His Glu Ser Thr Ala Phe Ala His Pro Ser Cys Asn Leu Ala
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<400> 52

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<213> homo sapiens

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      50                      55                            60

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65                      70                            75                            80

Arg   Met   Ile   Ala   Gly   Gln   Val   Leu   Asp   Ile   Asn   Leu   Ala   Ala   Glu   Pro
                        85                      90                            95

Lys   Val   Asn   Arg   Gly   Lys   Ala   Gly   Val   Lys   Arg   Ser   Ala   Ala   Glu   Met
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Tyr   Gly   Ser   Ser   Phe   Asp   Leu   Asp   Tyr   Asp   Phe   Gln   Arg   Asp   Tyr   Tyr
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Asp   Arg   Met   Tyr   Ser   Tyr   Pro   Ala   Arg   Val   Pro   Pro   Pro   Pro   Pro   Ile
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145                     150                           155                           160

Ser   Arg   Arg   Gly   Lys   Ser   Gly   Phe   Asn   Ser   Lys   Ser   Gly   Gln   Arg   Gly
                  165                     170                           175

Ser   Ser   Lys   Ser   Gly   Lys   Leu   Lys   Gly   Asp   Asp   Leu   Gln   Ala   Ile   Lys
                  180                     185                           190

Lys   Glu   Leu   Thr   Gln   Ile   Lys   Gln   Lys   Val   Asp   Ser   Leu   Leu   Glu   Asn
            195                     200                           205

Leu   Glu   Lys   Ile   Glu   Lys   Glu   Gln   Ser   Lys   Gln   Ala   Val   Glu   Met   Lys
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Asn   Asp   Lys   Ser   Glu   Glu   Glu   Gln   Ser   Ser   Ser   Ser   Val   Lys   Lys   Asp
225                     230                           235                           240

Glu   Thr   Asn   Val   Lys   Met   Glu   Ser   Glu   Gly   Gly   Ala   Asp   Asp   Ser   Ala
                  245                     250                           255

Glu   Glu   Gly   Asp   Leu   Leu   Asp   Asp   Asp   Asp   Asn   Glu   Asp   Arg   Gly   Asp
                  260                     265                           270

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Glu   Asp   Asp   Arg   Asp   Lys   Ala   Asn   Gly   Glu   Asp   Asp   Ser
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12